Dissolved Oxygen Protocol (Test Kit)

Field Guide

Task

Measure the dissolved oxygen of your water sample using a test kit.

What You Need

- ❑ *Hydrology Investigation Data Sheet*
- ❑ Latex gloves
- ❑ Goggles
- ❑ Dissolved oxygen kit
- ❑ Distilled water
- ❑ Waste bottle with cap for used chemicals
- ❑ Pen or pencil

In the Field

1. Fill in the top of the *Hydrology Investigation Data Sheet*.
2. Put on the gloves and goggles.
3. Rinse the sample bottle and your hands with sample water three times.
4. Place the cap on the empty sample bottle.
5. Submerge the sample bottle in the sample water.
6. Remove the cap and let the bottle fill with water. Move the bottle gently or tap it to get rid of air bubbles.
7. Put the cap on the bottle while it is still under the water.
8. Remove the sample bottle from the water. Turn the bottle upside down to check for air bubbles. If you see air bubbles, discard this sample. Collect another sample.
9. Follow the directions in your Dissolved Oxygen Kit to test your water sample.
10. Record the dissolved oxygen in your water sample on the *Data Sheet* as *Observer 1*.
11. Have two other students repeat the measurement using a new water sample each time.
12. Record their data on the *Data Sheet* as *Observers 2* and *3*.
13. Calculate the average of the three measurements.
14. Each of the three measurements should be within 1 mg/L of the average. If one of the measurements is not within 1 mg/L of the average, find the average of the other two measurements. If both of these measurements are within 1 mg/L of the new average, record this average.
15. Discard all used chemicals into the waste container. Clean your dissolved oxygen kit with distilled water.